

Gamification in EFL Classroom: Results of Implementation and Teachers' Point of View

I Gede Yoga Permana ^{1*}, Ni Wayan Monik Rismadewi ² & Nyoman Canestra Adi Putra ¹

¹ STKIP Agama Hindu Singaraja, Bali, Indonesia

² Universitas Pendidikan Ganesha, Bali, Indonesia

yogapermana@stkipahsingaraja.ac.id *

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ABSTRACT

The present study aimed to investigate the implementation of gamification on students' English proficiency and to assess teachers' reactions to its integration into the EFL classroom. This research employed a mixed-methods approach, utilizing a pretest-posttest experimental design complemented by semi-structured interviews. The study involved forty-three elementary students and two English teachers in one private school in Singaraja, Bali. In collecting the data, this study used multiple choice test, performance-based test and interview guide. The study was also incorporating rubric for assessing students speaking and writing skills. The results of the study found that the posttest score of overall English (M= 73.70, Std=7.812) was higher than the pretest score (M= 70.53, Std=8.174). The results of paired t test also confirmed that there was significant difference of mean score between pretest and posttest (Sig<.05). During the interview, the teachers mentioned that the students were engaged, active and motivated during learning process. The study concluded that gamification significantly influenced students' English skills, eliciting a positive response from teachers towards its implementation in the classroom. These findings contribute significantly to the broader discourse on innovative teaching methodologies and their favorable effects on student engagement and learning outcomes.



1. Introduction

English is an essential skill in the current industrial era since it still becomes a requirement for job applications, career boosters, research, etc. In response, many countries started integrating English into their educational curriculum as a compulsory subject (Mappiasse & Sihes, 2014). However, English is assumed a difficult skill for students in countries where English is their foreign language such as Indonesia (Marlina, 2012; Santosa, 2017). This is supported by the results of the English Proficiency Index (EPI) for Indonesia since 2011 have always been in the very low proficiency to moderate category. In recent times, the 2022 EPI results placed Indonesia in rank 81 out of 111 participating countries. The EPI results for Indonesia as an indicator of English proficiency level are in the low category. At the Asian level, Indonesia is at level 15 out of 24 countries. Compared with neighboring countries such as Vietnam, Indonesia's ranking is still quite far behind but slightly higher than Thailand and Myanmar.

Scholars have tried to identify and explore factors that contribute to low English competence. English teachers who lacked proper training and experience significantly contributed to the low performance of English students (Richards, 2017). Other factors such as low motivation and poor attitude toward English also play a significant role in determining the success of language learners (Getie, 2020; Imsa-Ard, 2020). The environment's lack of support limits learners' opportunity to speak English outside the classroom (Nugroho et al., 2020; Wang, 2010). The results of research related to low English proficiency place more emphasis on pedagogical issues (Munandar & Newton, 2021; Noughabi, 2017). Teachers are still comfortable with using traditional methods such as lecturing, drilling, and translation in teaching English although those approaches tend to make learning situations focused on the teacher (Chien, 2014; Ellis, 2009; Intarapanich, 2012). These situations are not yet in accordance with the curriculum implemented in Indonesia and the 21st-century learning context. In the current learning context, instruction should be student-oriented and the teacher should act as a

learning facilitator (Ramadhiyah & Lengkanawati, 2019). Moreover, teaching that applies traditional methods makes students passive learners and always depends on the teacher's presence (Nguyen & Terry, 2017).

Using technology in the classroom is seen as a modern way of teaching. The idea of bringing gamification into education setting is driven the fact that today's learners are technologically immersed (Turan & Akdag-Cimen, 2020). The use of technology in a variety of teaching and learning environments is now widely acknowledged as an essential instructional tool (Saichaie, 2020). Technology application is perceived to be able to create an active and engaging learning atmosphere (Carvalho & Bauters, 2021). Bringing technology to English language instruction especially, according to Mofareh (2019), promotes teaching and learning incentives, student independence, access to books and periodicals, efficient learning, and improved communication. The use of digital content technology in EFL learning improves learning and fosters meaningful learning experiences (Helvich et al., 2023).

Gamification is one of these technical advancements that could improve the efficiency of EFL instruction. The elements of gamification such as game and play are perceived able to engage learner in productive and fun learning environment (Martínez-Hita et al., 2021; Mee et al., 2020). Gaming and playing have long been acknowledged as mediating learning processes, such as simulators for training and education (Braga & Racilan, 2020). Gamification in educational context has been embraced to facilitate learning across a range of subject areas and contexts, as well as to address associated attitudes, behaviors, and activities, such as self-guided study, group work, assignment completion, facilitation of assessments, incorporation of exploratory learning approaches, and bolstering student creativity and retention (Caponetto et al., 2014).

Gamification by concept is defined as implementing gaming elements in non-gaming environment (Robson et al., 2015). Gamification is also known by several terms since its development in early 2008, such as 'productivity games', 'surveillance entertainment', 'funware', 'playful design', 'behavioral games', 'game layer' or 'applied gaming' (Deterding et al., 2011). Gamification is firstly introduced in business context to create an engaged and meaningful experiences for customers. Since then, gamification has been widely adapted in many fields. In education setting, gamification was able to increase learning motivation and engagement, made it gained popularity in the training and education sectors in recent years (Rincon-Flores et al., 2022; Smiderle et al., 2020). Gamification in education setting, is understood as a growing strategy for raising student enthusiasm and engagement through the integration of game design features (Dichev & Dicheva, 2017).

Gamification in classroom setting refers to the use of game design elements and game principles with the aim of raising student engagement and motivation (Vrcelj et al., 2023). Looking back at the history of gamification, the elements of game was first utilized to promote sales in 1980 by a game developer named Richard Bartle (Khaitova, 2021). Technology serves as the foundation of gamification, which has as its primary goal to improve user engagement and experience (Smiderle et al., 2020). Gamification presents a creative and engaging learning experience, it can inspire and drive students to achieve their English learning objectives (Su & Cheng, 2015). Mobile technologies offer the opportunity to embed learning in a natural environment and also provide motivational effects (Redjeki & Muhajir, 2021). Children who play video games may develop morals and obtain knowledge of the outside world (Coyne, 2003). The use of gamification in classroom becomes popular nowadays due to its benefits.

Game-based instruction is not a recent development in language acquisition. Researchers and teacher, and educators have long acknowledged the phenomenon of language acquisition through games, viewing play as a natural learning process that can promote social, cognitive, and even physical development (Godwin-Jones, 2014; Sobhani & Sadegh Bagheri, 2014). The primary goal of gamification, which is to enhance user engagement and motivation by utilizing game features like leaderboards, points, and real-time feedback, corresponds to the approach of integrating technology into language acquisition (Braga & Racilan, 2020).

Number of studies had tried to identify the possible effects of gamification in English instruction. On writing skills, gamification was able to improve students' writing skill and showed a satisfactory level of competency (Samosa et al., 2021). During emergency online learning, Nitiasih et al., (2022) found that gamification give significant influence on students' reading comprehension. During speaking class, introduction of gamification was able to boost students' confidence in speaking English (Ángeles Hernández-Prados et al., 2021). Tahir et al., (2022) discovered that gamification helps students listen better by enabling them to recognize social cues and order the information they take in to find the most important details. However, there is currently little study that examines English as a full skill and in elementary context. English proficiency in students must be evaluated holistically rather than just based on their mastery of a single ability. Furthermore, students in elementary level love to play games and they are already engaged in technological environment (Courtney & Graham, 2019; Ningsih, 2023).

To fill the existing gap, this research aims to identify the influence of gamification on students' English language skills consisting of speaking,

listening, reading and writing. Apart from that, this research also explores the teachers' point of view in regards to the implementation of gamification in English language learning.

2. Method

2.1 Design

This study used a mixed-method approach, including quasi-experimental pretests, posttests, and semi-structured interviews, to explore the impact of gamification on students' English skills and teachers' attitudes towards gamification in EFL classrooms. The design of the study is presented in [Table 1](#).

Table 1. Design of Study

| Pretest | Treatment | Posttest |
|---------|-----------|----------|
| X1 | Y | X2 |

X1: Pretest (Multiple choice and performance test)

Y: Gamification

X2: Posttest (Multiple choice and performance test)

2.2 Population and Sample

The study focused on fourth-grade students from a public school in Singaraja, Bali. The student body comprised several class groups, referred to as clusters. Employing a cluster random sampling technique, two classes totaling forty-four students were selected as the study's sample.

2.3 Data Collection & Instruments

In collecting data, this study used two methods: test and survey. The data collection method was supported by three main instruments. Those are test, rubric and interview guide. The test consisted of performance test for identifying students' speaking skills and listening comprehension, and multiple-choice test for reading comprehension and listening skills. Meanwhile, to identify teachers' point of view towards the implementation of gamification, this study conducted a semi structured interview. A rubric for assessing students' performance was implemented in order to judge students speaking and writing score. The rubric of assessing speaking was adapted from [Brown, \(2007\)](#) and the rubric for assessing writing from [Nunan \(2000\)](#). The instruments of the study before implemented to collect the data were validated and reliability checked. The instruments of test and rubric were validated using content validity and were judged by two experts of EFL. The results of content validity showed 0.70 which indicated a valid instrument. The instruments were then pilot tested using Cronbach alpha. The results confirmed that the instruments were reliable with score above 0.80 as shown in [Table 2](#).

Table 2. Reliability of The Instruments

| Instruments | Cronbach Alpha | Category |
|--------------------|----------------|----------|
| Rubric of Speaking | .815 | Reliable |
| Rubric of Writing | .884 | Reliable |
| Reading Test | .843 | Reliable |
| Listening Test | .818 | Reliable |

2.4 Data Analysis

In analyzing data of reading and listening, false responses received a score of zero, while the right answers received one mark. Data from speaking and writing were scored based on raw score from the rubric and multiplied by the weight score. The mean and standard deviation were then calculated using descriptive analysis. To compare the outcomes of the pretest and posttest, an inferential analysis of paired sample t-test statistics was then generated. Data collected from interview were analyzed using interactive model analysis developed by [Miles et al., \(2014\)](#).

2.5 Procedure

The study commenced with a pretest phase, assessing students' proficiency in listening, reading, writing, and speaking prior to any interventions. Subsequently, gamification strategies were implemented by teachers for English instruction, with teaching plans communicated beforehand. Posttests and interviews constituted the third phase, occurring every two weeks and covering speaking, listening, reading, and writing assessments. Finally, data collected were analyzed in the study's concluding phase.

Hypothesis

H1: There is significant effect of gamification implementation towards students' English skills

H0: There is no significant effect of gamification implementation towards students' English skills

3. Result

Following 12 instructional sessions, data pertaining to students' English proficiency, encompassing reading, listening, writing, and speaking scores, were gathered. Subsequently, these collected scores underwent descriptive analysis. The findings detailing students' individual English scores are presented in [Table 3](#).

Table 3. Descriptive Analysis of Respective English Score

| Skill | Mean Score | Standard Deviation | Kolmogorov-Smirnov |
|--------------------|------------|--------------------|--------------------|
| Pretest Speaking | 68.77 | 9.30 | .200c,d |
| Posttest Speaking | 73.86 | 8.23 | .200c,d |
| Pretest Listening | 70.56 | 12.10 | .082c |
| Posttest Listening | 77.59 | 12.44 | .064c |
| Pretest Reading | 68.63 | 11.87 | .060c |
| Posttest Reading | 72.68 | 11.03 | .133c |
| Pretest Writing | 71.27 | 12.01 | .062c |
| Posttest Writing | 75.65 | 9.57 | .112 ^c |
| Posttest Writing | 75.65 | 9.57 | .112 ^c |

From [Table 3](#), we observe the pretest and posttest scores for each skill. The pretest mean score for speaking skill is 68.77 with a standard deviation of 9.30, while the posttest mean score is 83.86 with a standard deviation of 8.23. Regarding listening skill, the pretest mean score is 70.56 with a standard deviation of 12.10, and the posttest mean score is 77.59 with a standard deviation of 12.44. For reading skill, the pretest mean score is 68.63 with a standard deviation of 11.87, and the posttest mean score is 72.68 with a standard deviation of 11.03. Meanwhile, for writing skill, the pretest mean score is 71.72 with a standard deviation of 12.01, and the posttest mean score is 75.65 with a standard deviation of 9.75.

Observing the mean scores for each skill, we note that the posttest scores surpass the pretest scores across all skills. To ascertain the significance of the mean difference between pretest and posttest scores, a paired t-test was conducted. Prior to running the t-test, it is imperative to assess the normality distribution of the data. Normality distribution is determined through Kolmogorov-Smirnov values, where a value of Sig. (2-tailed) exceeding .05 indicates normal distribution. As displayed in [Table 3](#), the Kolmogorov-Smirnov values exceed .05, indicating normal distribution. Given the normal distribution of the data, the parametric test of paired sample t-test can proceed. The results are outlined in [Table 4](#).

Table 4. Paired Sample t Test of Respective Skills

| Paired | Mean Difference | Sig. (2-tailed) |
|--------------------|-----------------|-----------------|
| Pretest Speaking | 5.09 | .001 |
| Posttest Speaking | | |
| Pretest Listening | 7.02 | .001 |
| Posttest Listening | | |
| Pretest Reading | 4.04 | .001 |
| Posttest Reading | | |
| Pretest Writing | 4.38 | .009 |
| Posttest Writing | | |

[Table 4](#) provides details on the mean differences between pretests and posttests. Specifically, the mean difference is 5.09 for speaking, 7.02 for listening, 4.04 for reading, and 4.38 for writing skill. Mean differences are considered significant if the value of Sig. (2-tailed) is less than .05. Consequently, the mean differences are statistically significant for both pretests and posttests across all skills. Furthermore, students' overall English skills were analyzed, and the results are presented in [Table 5](#).

Table 5. Descriptive Analysis Overall English Score

| Skill | Mean Score | Standard Deviation | Kolmogorov Smirnov |
|----------|------------|--------------------|---------------------|
| Pretest | 69.81 | 5.86 | .200 ^{c,d} |
| Posttest | 74.94 | 5.31 | .200 ^{c,d} |

The mean of students' English skills pretest is 69.81 with 5.86 standard deviation. Meanwhile, the students' English skill in posttest is 74.94. The test then followed with normality test. From the results of Kolmogorov-Smirnov test, the data are normally distributed since the values exceed 0.05. Paired sample t test was then calculated.

Table.6 Paired Sample t Test II

| Paired | Mean Difference | Sig. (2-tailed) |
|----------|-----------------|-----------------|
| Pretest | 5.136 | 0.001 |
| Posttest | | |

The findings displayed in Table 6 confirm that the mean difference between pretest and posttest scores for students' English skills is 5.136, with a Sig. (2-tailed) value of 0.001, indicating significant differences.

Additionally, teachers provided feedback on the implementation of gamification in the classroom. They were asked about their perspectives on teaching with gamification and its impact on students' learning process. During the interviews, a teacher remarked:

"I see that children are very enthusiastic if we apply games in learning"

Excerpt 1 (T1/F)

"I think implementing games in the classroom will increase students' enthusiasm for learning English"

Excerpt 2 T2/M

The teachers asserted that students displayed significant enthusiasm throughout the learning process and thoroughly enjoyed engaging with gamification. This suggests that gamification successfully fostered a joyful learning atmosphere for the students.

When questioned about their observations regarding students' learning activity upon the introduction of gamification, they responded:

"Students, in my opinion, prefer learning that incorporates gaming components. They all already own smartphones and use them more frequently. This can be used to facilitate learning so that they can have fun while learning."

Excerpt 3 (T2/M)

"Today's children are introduced to cellphone games from an early age. I think it's appropriate for them to enjoy learning if there are games like this gamification."

Excerpt 4 (T1/F)

The teachers highlighted that students are already accustomed to technology-based learning methods. They emphasized that utilizing gamification was suitable due to students' inherent interest in gaming. Furthermore, the teachers noted that gamification effectively facilitated the students' learning process.

When asked about their perspectives on how gamification can influence students' learning, they responded:

"I think gamification is very useful for creating an active classroom atmosphere. I see students are very motivated to learn. Usually, they are passive and tend to be afraid of learning English."

Excerpt 5 (T1/F)

"Students really enjoy the process of learning English. It seems to them that English is not a difficult subject."

Excerpt 6 (T2/M)

According to the teachers, integrating games into the learning process garners students' interest in educational activities. The teachers exhibited a favorable attitude towards the implementation of gamification in the classroom. Additionally, they emphasized that students prefer this approach to learning over traditional methods. Furthermore, the teachers noted observable behavioral changes among students following the introduction of gamification.

The study's findings corroborated that gamification significantly impacted students' English skills, resulting in improved proficiency. Students demonstrated enhanced English abilities after being instructed using gamification techniques. Moreover, teachers expressed positive sentiments regarding the integration of gamification. They perceived gamification as instrumental in cultivating an engaging learning environment and motivating students throughout the teaching and learning process.

5. Discussion

Based on the Paired Samples Test output table above, the Sig value is known. (2-tailed) is .001 < .05, so it can be concluded that there is a significant mean difference between the Pre-Test and Post-Tests of English skill, which means that there is an influence of the use of gamification on students' English skill. Therefore, H1 is accepted. Several previous studies had identified similar results. A study by [Sanchez et al., \(2020\)](#) aimed to improve student level of English language acquisition, through gamified quizzes found

a more substantial percentage difference in academic achievement than was shown by regular quizzes. Students also shown their eagerness to contribute in independent learning environment by using a variety of gamified websites to enhance their learning process. This study confirmed the results by several previous study identifying the influence of gamification on students language skill. [Bustillo et al., \(2017\)](#) found that the application of mobile application such as Duolingo gave a positive impact on students' listening comprehension. A recent study by [Pingmuang and Koraneekij \(2022\)](#) found that gamification when integrated with corrective feedback enhanced students' writing skills. A similar results were also identified by [Kuswandi and Fadhli \(2022\)](#) who found that reading is important skill for elementary level students that can be improved using gamification. Incorporating gamification into English brings many benefits for the process of language acquisition ([Jie et al., 2023](#); [Nitiasih et al., 2022](#); [Panmei & Waluyo, 2023](#)).

Gamification is also known as serious games where games are played not only for entertainment but also used for educational purposes ([Rincon-Flores et al., 2022](#)). During the learning process with gamification, students looked quite enthusiastic and motivated. They look comfortable and happy with the new learning environment. This is also in line with study conducted by [Rahmani \(2020\)](#) who found that gamification brings some learning outcomes for students such as increase in motivation, the encouragement of good attitudes and better performance, the development of 21st-century skills and higher levels of cognitive success, the promotion of social interaction and independence. Games and gamification can have a good impact on student experiences, including interest level, academic rigor, and intrinsic motivation by offering chances for autonomy, relatedness, and competence ([Barata et al., 2013](#)). Gamification has demonstrated its efficacy in enhancing students' integration of the learning process by elevating their level of competency and engagement with the instructional content ([Al-Dosakee & Ozdamli, 2021](#)).

A study conducted by [Aljraiwi \(2019\)](#) confirmed that gamification when applied in elementary level was shown effective in enhancing students' academic skill and boost students' creative thinking skills. Teaching English to young learners, teachers should carefully select appropriate teaching strategies. Language teachers should realize that there are difference of methods and strategies of teaching English between young learners and adult learners ([Taghizadeh & Hasani Yourdshahi, 2020](#)). An inappropriate teaching will create an unpleasant learning environment and could lead to negative perception towards the subject taught. Game is seen as an active way of teaching young learners due to its characteristics that suitable for young learners' level

of cognitive development. This is because in game-based education, there is a lot of audio-visual content that can attract students' interest in learning ([Susnawati et al., 2019](#)). Students, whenever they see pictures and animation will definitely be interested in seeing the learning material ([Tianjuan, 2019](#)). Furthermore [Dichev and Dicheva \(2017\)](#) stated that the major objectives of gamification are to improve specific skills, create objectives that give learning a purpose, engage students, optimize learning, assist behavior change, and socialize. [Waluyo \(2020\)](#) also mentioned that gamification creates a playful, motivating and engaging learning environment. Gamification also promotes collaboration and problem solving skills among students ([Lee et al., 2023](#)).

The students show great motivation to learn when games are introduced compared to when studying conventionally. Study conducted by [Nitiasih et al., \(2022\)](#), found that gamification associated with local stories were able to increase students motivation in reading and enhance their reading comprehension. The study also suggested that in gamification learning environment, teacher can utilize a digital-based story. Currently, many research results have found that digital-based reading content is more popular than printed-based reading content ([Kaban & Karadeniz, 2021](#); [Mutalib et al., 2011](#)). In a digital story, the content of the story is supported with animation, music and motion which students found it fascinating ([Takacs & Bus, 2016](#)).

The results of this study were in line with previous studies identifying teachers' attitude and response toward gamification. [Asiri \(2019\)](#) found that teachers are showing willingness to use gamification in classroom. [Asifayanti et al., \(2021\)](#) also found that teachers believed gamification uses game aspects to boost student engagement, motivation, and interest. A study identifying teachers candidate response toward gamification found that they are eager to try gamification for their teaching practice section ([Bicen et al., 2022](#)). The practice of gamification in classroom is believed by pre-service teacher to improved learners' creative, critical and problem-solving skills ([Mee et al., 2020](#)).

The use of technology in learning English, especially for young learners, is highly recommended by several previous research results. Study conducted by [Budianto et al., \(2022\)](#) found that students perceived that technology can be a rich learning medium and can make it easier for them to learn English. [Kurt \(2021\)](#) stressed that incorporating technology in young learners' learning environment is encouraged realizing that they are 'digital native' that possess different thinking, acting and learning compared with the previous generation. This was also supported by [Hapsari et al., \(2023\)](#) claiming that young learners prefer to learn using technology in classroom since they are accustomed with technology.

A recent study by Minarni et al., (2023) found that students are motivated and engaged in ICT-based learning environment.

The use of technology in learning has been proven to provide benefits in the language acquisition process. However, it should be noted that the application of learning technology such as gamification in the classroom is certainly not an easy thing (Araújo & Carvalho, 2022). There are several things that need to be prepared, such as the teacher's mastery of technology, the right material and the teacher must ensure that the focus of gamification is bringing game elements into learning so that learning can be fun and meaningful (Demirbilek et al., 2022; Prabawa, 2017). Teachers who do not have this ability tend to return to using traditional methods such as the chalk-and-talk approach.

5. Conclusions

This study aimed to assess the impact of gamification on elementary-level students' English skills and gauge teachers' responses to its implementation in the EFL classroom. The hypothesis (H1) was supported by the statistical analysis, indicating a significant effect of gamification on students' English skills (Sig. <.05). Teachers responded positively to gamification, noting students' increased motivation, engagement, activity, and confidence. They also recommended its continued use in the classroom. The study underscores several key points regarding gamification in the EFL classroom. Students exhibited heightened enthusiasm and motivation in the gamified learning environment compared to traditional teaching methods. Gamification serves as an effective alternative teaching strategy, engaging students in game-based learning experiences and enhancing their English skills.

Furthermore, gamification proves versatile across various educational levels and can bolster students' language sub-skills. Its implementation fosters an active learning atmosphere, emphasizes student-centered learning, and aligns with the technological prowess of contemporary students. However, it's imperative for teachers to maintain control over the learning process to ensure students derive knowledge from the integrated game content rather than solely focusing on gameplay. While this research focused on the impact of gamification and teachers' perspectives on its implementation in the EFL context, it's crucial to acknowledge the importance of teacher readiness, competence, and knowledge (TPACK) in technology-based instruction. Future research should delve deeper into assessing teacher readiness and competency levels, as well as identifying factors that support the successful integration of technology-based instruction in English language learning.

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References

- Al-Dosakee, K., & Ozdamli, F. (2021). Gamification in teaching and learning languages: A systematic literature review. *Revista Romaneasca Pentru Educatie Multidimensionala*, 13(2), 559–577. <https://doi.org/10.18662/rrem/13.2/436>
- Aljraiwi, S. (2019). Effectiveness of gamification of web-based learning in improving academic achievement and creative thinking among primary school students. *International Journal of Education and Practice*, 7(3), 242–257. <https://doi.org/10.18488/journal.61.2019.73.242.257>
- Ángeles Hernández-Prados, M., Luisa Belmonte, M., & Manzanares-Ruiz, J. C. (2021). How to run your own online business: A gamification experience in ESL. *Education Sciences*, 11(11). <https://doi.org/10.3390/educsci11110697>
- Araújo, I., & Carvalho, A. A. (2022). Enablers and difficulties in the implementation of gamification: A case study with teachers. *Education Sciences*, 12(3). <https://doi.org/10.3390/educsci12030191>
- Asifayanti, Weda, S., & Abduh, A. (2021). Exploring teachers' perception on gamification in online grammar teaching. *Journal of Art, Humanity & Social Studies*, 1(4), 1–11.
- Asiri, M. J. (2019). Do teachers' attitudes, perception of usefulness, and perceived social influences predict their behavioral intentions to use gamification in EFL classrooms? Evidence from the middle east. *International Journal of Education and Practice*, 7(3), 112–122. <https://doi.org/10.18488/journal.61.2019.73.112.122>
- Barata, G., Gama, S., Jorge, J., & Gonçalves, D. (2013). Improving participation and learning with gamification. *ACM International Conference Proceeding Series, May 2014*, 10–17. <https://doi.org/10.1145/2583008.2583010>
- Bicen, H., Demir, B., & Serttas, Z. (2022). The attitudes of teacher candidates towards the gamification process in education. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 13(2), 39–50. <https://doi.org/10.18662/brain/13.2/330>
- Braga, J., & Racilan, M. (2020). Games and gamification. *Revista Brasileira de Linguística Aplicada*, 20(4), 693–702.

<https://doi.org/10.1590/1984-6398202017555>

- Brown, H. . (2007). *Principles of language learning and teaching*. Pearson Education.
- Budianto, S., Sayidah, N., Sucipto, & Mustofa, A. (2022). Teachers' and students' perception on acquiring English vocabulary for young learners using mobile apps in EFL context. *World Journal of English Language*, 12(8), 402–409. <https://doi.org/10.5430/wjel.v12n8p402>
- Bustillo, J., Rivera, C., Guzmán, J. G., & Ramos Acosta, L. (2017). Benefits of using a mobile application in learning a foreign language. *Sistemas y Telemática*, 15(40), 55–68. <https://doi.org/10.18046/syt.v15i40.2391>
- Caponetto, I., Earp, J., & Ott, M. (2014). Gamification and education: A literature review. *Proceedings of the European Conference on Games-Based Learning*, 1(2009), 50–57.
- Carvalho, C. V. de, & Bauters, M. (2021). Technology supported active learning student-centered approaches. In C. V. de Carvalho & M. Bauters (Eds.), *Lecture Notes in Educational Technology* (pp. 1–12). Springer. https://doi.org/10.1007/978-981-16-2082-9_3
- Chien, C. N. (2014). Analysis of EFL teaching methods for taiwan university students. *Journal of Language Teaching and Research*, 5(5), 985–993. <https://doi.org/10.4304/jltr.5.5.985-993>
- Courtney, L., & Graham, S. (2019). “It’s like having a test but in a fun way” Young learners’ perceptions of a digital game-based assessment of early language learning. *Language Teaching for Young Learners*, 1(2), 161–186. <https://doi.org/10.1075/ltyl.18009.cou>
- Coyne, R. (2003). Mindless repetition: Learning from computer games. *Design Studies*, 24(3), 199–212. [https://doi.org/10.1016/S0142-694X\(02\)00052-2](https://doi.org/10.1016/S0142-694X(02)00052-2)
- Demirbilek, M., Talan, T., & Alzouebi, K. (2022). An Examination of the Factors and Challenges to Adopting Gamification in English Foreign Language Teaching. *International Journal of Technology in Education*, 5(4), 654–668. <https://doi.org/10.46328/ijte.358>
- Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). From game design elements to gamefulness: Defining “gamification.” *Proceedings of the 15th International Academic MindTrek Conference: Envisioning Future Media Environments, MindTrek 2011, March 2014*, 9–15. <https://doi.org/10.1145/2181037.2181040>
- Dichev, C., & Dicheva, D. (2017). Gamifying education: what is known, what is believed and what remains uncertain: a critical review. In *International Journal of Educational Technology in Higher Education* (Vol. 14, Issue 1). *International Journal of Educational Technology in Higher Education*. <https://doi.org/10.1186/s41239-017-0042-5>
- Ellis, R. (2009). Task-based language teaching: Sorting out the misunderstandings. *International Journal of Applied Linguistics*, 19(3), 221–246. <https://doi.org/10.1111/j.1473-4192.2009.00231.x>
- Getie, A. S. (2020). Factors affecting the attitudes of students towards learning English as a foreign language. *Cogent Education*, 7(1), 1–37. <https://doi.org/10.1080/2331186X.2020.1738184>
- Godwin-Jones, R. (2014). Games in language learning: Opportunities and challenges. *Language Learning and Technology*, 18(2), 9–19.
- Hapsari, E. D., Kurniawati, I. D., Setiawan, K. E. P., & Mahendra, M. I. N. (2023). Kindergarten in the digital era: Developing engaging android-based educational tools for letters and numbers. *Utamax: Journal of Ultimate Research and Trends in Education*, 5(3), 192–203. <https://doi.org/10.31849/utamax.v5i3.14539>
- Helvich, J., Novak, L., Mikoska, P., & Hubalovsky, S. (2023). A systematic review of gamification and its assessment in EFL teaching. *International Journal of Computer-Assisted Language Learning and Teaching*, 13(1), 1–21. <https://doi.org/10.4018/IJCALLT.322394>
- Imsa-Ard, P. (2020). Motivation and attitudes towards English language learning in Thailand: A large-scale survey of secondary school students. *REFlections*, 27(2), 140–161.
- Intarapanich, C. (2012). Teaching methods, approaches and strategies found in EFL classrooms: A case study in Lao PDR. *Social and Behavioral Sciences Symposium, 4th International Science, Social Science, Engineering and Energy Conference*, 306–311. <https://doi.org/10.1016/j.sbspro.2013.08.510>
- Jie, Y. X., Zakaria, A. Z. binti, & Hassan, H. binti. (2023). The use of gamification in enhancing students engagement and performance in ESL speaking lessons. *International Journal of Academic Research in Business and Social Sciences*, 13(1), 477–503. <https://doi.org/10.6007/ijarbss/v13-i1/16205>
- Kaban, A. L., & Karadeniz, S. (2021). Children’s reading comprehension and motivation on screen versus on paper. *SAGE Open*, 11(1), 1–11. <https://doi.org/10.1177/2158244020988849>

- Khaitova, N. F. (2021). History of gamification and its role in the educational process. *International Journal of Multicultural and Multireligious Understanding*, 8(5), 212. <https://doi.org/10.18415/ijmmu.v8i5.2640>
- Kurt, G. (2021). Technology-mediated tasks in the young learners' EFL classroom. *Elementary Education Online*, 20(1), 327–340. <https://doi.org/10.17051/ilkonline.2021.01.031>
- Kuswandi, D., & Fadhli, M. (2022). The effects of gamification method and cognitive style on children's early reading ability. *Cogent Education*, 9(1). <https://doi.org/10.1080/2331186X.2022.2145809>
- Lee, J., Lim, R., Mohamad, F. S., Chan, K. G., & Mas'ud, F. (2023). Collaborative creativity among undergraduate students as game creators during gamification in a university-wide elective course. *Journal of University Teaching and Learning Practice*, 20(1). <https://doi.org/10.53761/1.20.01.16>
- Mappiasse, S. S., & Sihes, A. J. Bin. (2014). Evaluation of english as a foreign language and its curriculum in indonesia: A review. *English Language Teaching*, 7(10), 113–122. <https://doi.org/10.5539/elt.v7n10p113>
- Marlina, L. (2012). Learning English as foreign language in Indonesia through English children's literature. *International Journal of Literacies*, 19(4), 41–51. <https://doi.org/http://dx.doi.org/10.18848/2327-0136/CGP/v19i04/48801>
- Martínez-Hita, M., Gómez-Carrasco, C. J., & Miralles-Martínez, P. (2021). The effects of a gamified project based on historical thinking on the academic performance of primary school children. *Humanities and Social Sciences Communications*, 8(1), 1–10. <https://doi.org/10.1057/s41599-021-00796-9>
- Mee, R. W. M., Shahdan, T. S. T., Ismail, M. R., Ghani, K. A., Pek, L. S., Von, W. Y., Woo, A., & Rao, Y. S. (2020). Role of gamification in classroom teaching: Pre-service teachers' view. *International Journal of Evaluation and Research in Education*, 9(3), 684–690. <https://doi.org/10.11591/ijere.v9i3.20622>
- Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). SAGE Publications.
- Minarni, F., Mustofa, M., & Nursafira, M. S. (2023). Breaking textbook barriers: Powtoon videos in engaging ICT learning for young EFL learners. *Elsya : Journal of English Language Studies*, 5(3), 285–299. <https://doi.org/10.31849/elsya.v5i3.14923>
- Mofareh, A. (2019). The use of technology in English language teaching. *Frontiers in Education Technology*, 2(3), p168. <https://doi.org/10.22158/fet.v2n3p168>
- Munandar, M. I., & Newton, J. (2021). Indonesian EFL teachers' pedagogic beliefs and classroom practices regarding culture and interculturality. *Language and Intercultural Communication*, 21(2), 158–173. <https://doi.org/10.1080/14708477.2020.1867155>
- Mutalib, A. A., Aziz, N., & Amilah Shaffiei, Z. (2011). Digital storytelling makes reading fun and entertaining. *International Journal of Computer Applications*, 18(1), 20–26. <https://doi.org/10.5120/2248-2878>
- Nguyen, H., & Terry, D. R. (2017). English learning strategies among EFL learners: A narrative approach. *IAFOR Journal of Language Learning*, 3(1), 4–19. <https://doi.org/10.22492/ijll.3.1.01>
- Ningsih, N. L. A. B. H. (2023). The importance of game-based learning in English learning for young learners in the 21st century. *The Art of Teaching English as a Foreign Language*, 4(1), 25–30. <https://doi.org/10.36663/tatefl.v4i1.492>
- Nitiasih, P. K., Permana, I. G. Y., & Budiarta, L. G. R. (2022). Enhancing students' reading comprehension with gamification of local wisdom stories during emergency online learning. *Journal of Education Technology*, 6(3), 515–520. <https://doi.org/10.23887/jet.v6i3.47289>
- Noughabi, M. A. (2017). Current Pedagogical Challenges in Iranian EFL Teachers' Views: A Qualitative Study. *Journal of Education and Practice*, 8(9), 217–228
- Nugroho, A., Zamzami, M. R. A., & Ukhrowiyah, N. F. (2020). Language input, learning environment, and motivation of a successful EFL learner. *Journal on English as a Foreign Language*, 10(1), 46–69. <https://doi.org/10.23971/jefl.v10i1.1511>
- Nunan, D. (2000). *Second language teaching & learning*. Heinle.
- Panmei, B., & Waluyo, B. (2023). The pedagogical use of gamification in English vocabulary training and learning in higher education. *Education Sciences*, 13(1). <https://doi.org/10.3390/educsci13010024>
- Pingmuang, P., & Koraneekij, P. (2022). Mobile-assisted language learning using task-based approach and gamification for enhancing writing skills in EFL students. *Electronic Journal of E-Learning*, 20(5), 623–638. <https://doi.org/10.34190/ejel.20.5.2339>

- Prabawa, H. W. (2017). A review of gamification in technological pedagogical content knowledge. *Journal of Physics: Conference Series*, 812. <https://doi.org/10.1088/1742-6596/755/1/011001>
- Rahmani, E. F. (2020). The benefits of gamification in the English learning context. *IJEE (Indonesian Journal of English Education)*, 7(1), 32–47. <https://doi.org/10.15408/ijee.v7i1.17054>
- Ramadhiyah, S., & Lengkanawati, N. S. (2019). Exploring EFL learner autonomy in the 2013 curriculum implementation. *Indonesian Journal of Applied Linguistics*, 9(1), 231–240. <https://doi.org/10.17509/ijal.v9i1.15626>
- Redjeki, I. S., & Muhajir, R. (2021). Gamification in EFL classroom to support teaching and learning in 21st century. *JEES (Journal of English Educators Society)*, 6(1), 68–78. <https://doi.org/10.21070/jees.v6i1.882>
- Richards, J. C. (2017). Teaching English through English: Proficiency, pedagogy and performance. *RELC Journal*, 48(1), 7–30. <https://doi.org/10.1177/0033688217690059>
- Rincon-Flores, E. G., Mena, J., & López-Camacho, E. (2022). Gamification as a teaching method to improve performance and motivation in tertiary education during covid-19: A research study from Mexico. *Education Sciences*, 12(1). <https://doi.org/10.3390/educsci12010049>
- Robson, K., Plangger, K., Kietzmann, J. H., McCarthy, I., & Pitt, L. (2015). Is it all a game? Understanding the principles of gamification. *Business Horizons*, 58(4), 411–420. <https://doi.org/10.1016/j.bushor.2015.03.006>
- Saichaie, K. (2020). Blended, flipped, and hybrid learning: Definitions, developments, and directions. *New Directions for Teaching and Learning*, 2020(164), 95–104. <https://doi.org/10.1002/tl.20428>
- Samosa, R. C., Policarpio, M. V, Cañamaque, B. O., Honeylyn Camocamo, P. A., & Marie Clavito, J. E. (2021). Gamification as an innovative strategy to improve learners' writing skills. *International Journal of Academic Multidisciplinary Research*, 5(12), 25–32.
- Sanchez, D. R., Langer, M., & Kaur, R. (2020). Gamification in the classroom: Examining the impact of gamified quizzes on student learning. *Computers and Education*, 144(October 2018), 103666.
- Santosa, M. H. (2017). Learning approaches of Indonesian EFL gen Z students in a flipped learning context. *Journal on English as a Foreign Language*, 7(2), 183–208. <https://doi.org/10.23971/jefl.v7i2.689>
- Smiderle, R., Rigo, S. J., Marques, L. B., Peçanha de Miranda Coelho, J. A., & Jaques, P. A. (2020). The impact of gamification on students' learning, engagement and behavior based on their personality traits. *Smart Learning Environments*, 7(1). <https://doi.org/10.1186/s40561-019-0098-x>
- Sobhani, M., & Sadegh Bagheri, M. (2014). Attitudes toward the effectiveness of communicative and educational language games and fun activities in teaching and learning English. *Theory and Practice in Language Studies*, 4(5), 1066–1073. <https://doi.org/10.4304/tpls.4.5.1066-1073>
- Susnawati, K., Marhaeni, A. A. I. N., & Ramendra, D. P. (2019). The effect of language games with audio visual aids on students' speaking competence at fourth graders of Tunas Daud elementary school. *Journal of Education Research and Evaluation*, 3(3), 187–192. <https://doi.org/10.23887/jere.v4i1.21725>
- Taghizadeh, M., & Hasani Yourdshahi, Z. (2020). Integrating technology into young learners' classes: language teachers' perceptions. *Computer Assisted Language Learning*, 33(8), 982–1006. <https://doi.org/10.1080/09588221.2019.1618876>
- Tahir, M. H. M., Martin, S. G. A., & Mohammad, H. H. (2022). The knight's quest: The effectiveness of virtual gamification for listening skills activity in English language. *E-Proceedings of Innovation, Product Launching and Entrepreneurship (INNOPLEN) 2022*, 102–104.
- Takacs, Z. K., & Bus, A. G. (2016). Benefits of motion in animated storybooks for children's visual attention and story comprehension. An eye-tracking study. *Frontiers in Psychology*, 7(OCT), 1–12. <https://doi.org/10.3389/fpsyg.2016.01591>
- Tianjuan, Z. (2019). Methods of stimulating students' interest in English learning. *4th International Conference on Social Sciences and Economic Development (ICSSSED 2019) Methods*, 472–475. <https://doi.org/10.2991/icsssed-19.2019.90>
- Turan, Z., & Akdag-Cimen, B. (2020). Flipped classroom in English language teaching: a systematic review. *Computer Assisted Language Learning*, 33(5–6), 590–606. <https://doi.org/10.1080/09588221.2019.1584117>
- Vrcelj, A., Hoić-Božić, N., & Dlab, M. H. (2023). Use of gamification in primary and secondary education: A systematic literature review. *International Journal of Educational Methodology*, 9(1), 13–27.

- Waluyo, B. (2020). Learning outcomes of a general english course implementing multiple e-learning technologies and active learning concepts. *Journal of Asia TEFL*, 17(1), 160–181. <https://doi.org/10.18823/asiatefl.2020.17.1.10.160>
- Wang, X. (2010). Features of input of second language acquisition. *Journal of Language Teaching and Research*, 1(3), 282–284. <https://doi.org/10.4304/jltr.1.3.282-284>